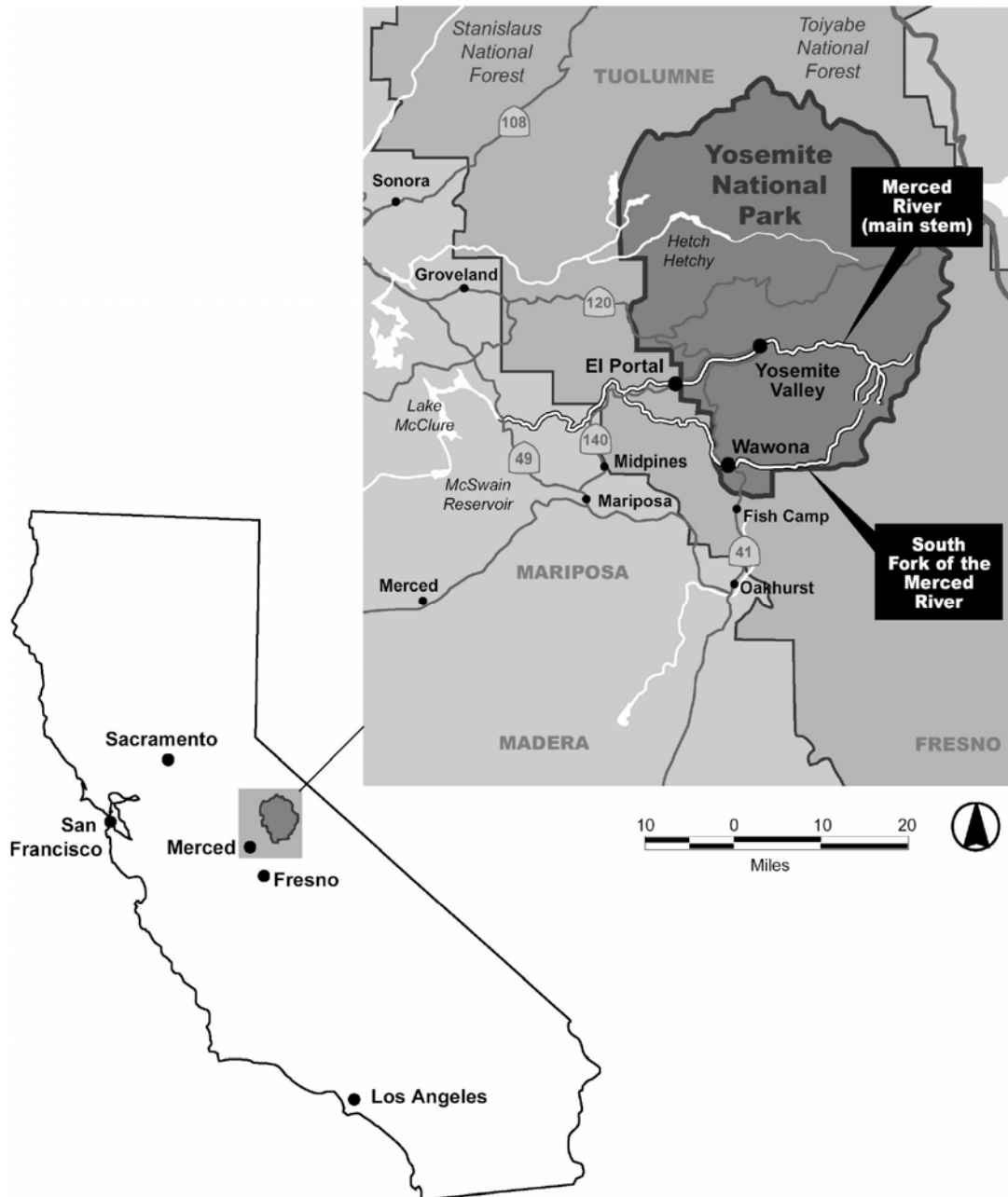


# Chapter I: Purpose and Need

## Introduction

The National Park Service (NPS) is considering the rehabilitation, restoration, and resurfacing of the Yosemite Valley Loop Road within Yosemite Valley, Yosemite National Park, California (figure I-1). Maintenance repairs have not been made on the roadway and associated drainage facilities for many years, and visitor safety is a growing concern along this heavily-used travel corridor.

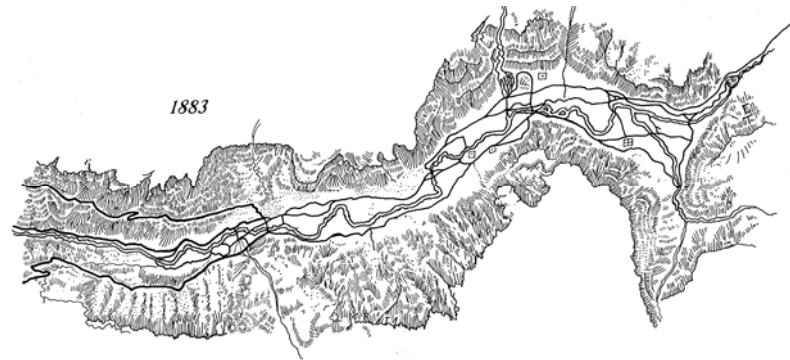


**Figure I-1.** Yosemite National Park, California.

Source: *Revised Merced River Plan/SEIS* (NPS 2005a)

## Project Background

The Yosemite Valley Loop Road is a historic feature in Yosemite National Park, dating back to the 1870s. First built as a stage coach road in 1872, the Yosemite Valley Loop Road has seen several iterations over its long history. The Grand Carriage Drive around Yosemite Valley was completed in 1882 (figure I-2), marking the creation of a loop road traversing the northern and southern boundaries of the Valley (Greene 1987). Two years later, the first real funding for Valley roads was secured, at which time \$25,000 was appropriated to purchase, construct, and complete avenues, roads, trails, walks, and bridges in Yosemite Valley. The road was originally paved in 1909, and culverts were first installed a year later beneath stretches of Southside Drive.



**Figure I-2.** Yosemite Valley Roads, 1883.

Source: Historic American Engineering Record, National Park Service, Walton D. Stowell II, 2001.

By 1929, over 29 miles of paved roads were open to automobile travel in Yosemite Valley with 6 new bridges crossing the Merced River and Yosemite Creek (Quin 1991). In 1938, the present day Yosemite Valley Loop Road design was created to alleviate traffic congestion and increase safety along the roadway. During that same year, a major flood resulted in significant damage and necessitated major repairs to the roadway. Another flood in 1950 caused major damage to the road and, as a result, many culverts and headwalls were replaced, sections of the road repaved, bridges repaired, and road shoulders restored. Again in 1997, a major flood damaged sections of the Yosemite Valley Loop Road and many isolated sections required repaving, shoulder reinforcement, and river bank stabilization where the road is in close proximity to the Merced Wild and Scenic River. After each of these flood events, spot repairs were made to the roadway as needed. However, much-needed, comprehensive maintenance and repair of the roadway and associated drainage structures has not been performed for many decades.

Since 1980, annual visitation to Yosemite National Park has averaged 3.4 million people, 95% of which pass through Yosemite Valley (NPS 2005d). Yosemite Valley is one of the most heavily developed areas of the park and is open to visitation year round. As a result, the Yosemite Valley Loop Road experiences the heaviest traffic volumes of any area in the park. Automobiles make up the majority of the volume, but tour buses and public transportation vehicles also contribute significantly to Yosemite Valley traffic. Bus transportation in Yosemite National Park includes regional public transportation, charter and tour bus operators, concessioner-operated tours, and shuttle bus services provided by the park concessioner. With the exception of shuttle bus services

in Tuolumne Meadows, and between Wawona and the Mariposa Grove, nearly all of these buses travel to, from, and within Yosemite Valley.

## Purpose of and Need for the Project

The purpose of this project is to repair and resurface existing roadway pavement, rehabilitate or replace adjacent drainage features (e.g., culverts, diversion ditches, and retaining walls), and improve the condition of adjacent roadside parking along approximately 12.5 miles of the Yosemite Valley Loop Road in Yosemite Valley. All actions proposed in this project are located within the Yosemite Valley Historic District. No roadway widening (outside of the original road prism width of 22 feet), realignment, or changes to vehicular or pedestrian circulation patterns, as called for in the *Yosemite Valley Plan* (NPS 2000a), will be undertaken. Similarly, no changes will be made to existing vehicular speed limits.

The need for this project is evidenced by the fact that the existing road surface and associated drainage features are in poor condition because major maintenance repairs have not been undertaken for many years. Numerous existing culverts are undersized, in disrepair, and/or ineffectively located to capture peak seasonal run-off (figure I-3). In addition, informal roadside parking at some locations along the Yosemite Valley Loop Road presents visitor safety and resource impact concerns.

Seasonal flooding  
at Bridalveil Creek  
drainage



Dysfunctional  
culvert at El  
Capitan Straight



Dysfunctional  
culvert at  
Bridalveil  
Straight



Degraded  
curbing at  
Bridalveil  
Straight



**Figure I-3.** Examples of existing roadway and drainage conditions along the Yosemite Valley Loop Road near El Capitan Straight and Bridalveil Straight, Yosemite National Park, California. (NPS Photos)

## Planning Context

The proposed project is not tiered to the *Yosemite Valley Plan*, nor does it implement specific actions called for in the *Yosemite Valley Plan* (NPS 2000a). However, most of the Yosemite Valley Loop Road Project area is located within the Merced Wild and Scenic River corridor, as defined in the *Revised Merced River Plan* (NPS 2005b). As such, the proposed project will be subject to the requirements of the *Revised Merced River Plan* to the extent that its potential effects coincide with the Merced Wild and Scenic River corridor.

### **Visitor Experience and Resource Protection (VERP) Management Program**

In 2004, the park initiated a User Capacity Management Program, which includes a Visitor Experience and Resource Protection (VERP) program for the Merced Wild and Scenic River corridor, including the segment that flows through Yosemite Valley, to ensure that the river's Outstandingly Remarkable Values will be protected and enhanced in compliance with Wild and Scenic River Act requirements. As part of the VERP program, a series of indicators and standards have been defined that are being monitored within the Merced Wild and Scenic River corridor in Yosemite Valley.

Specific indicators that are relevant to roadside parking in areas along the Yosemite Valley Loop Road include the following:

- Occupied Parking Versus Capacity
- Actual Number of People Recreating within the River Protection Overlay (RPO) (150 feet on either side of the river measured from the ordinary high water mark)
- River Bank Erosion that is Accelerated or Caused by Visitor Use
- Number of Informal (Social) Trails
- Length of Informal (Social) Trails in Meadows
- Extent/Magnitude of Three Traditionally Used Plant Species

If monitoring results indicate that standards associated with these indicators are, or could be exceeded, the park will implement management actions to ensure that the river's Outstandingly Remarkable Values in Yosemite Valley will be protected and enhanced. As described in the *Revised Merced River Plan SEIS* (p. II-41, NPS 2005a), management actions could include the future restriction or elimination of parking in some areas.

## Public Scoping Process

Public Scoping was initiated for the rehabilitation of the Yosemite Valley Loop Road Environmental Assessment on May 2, 2005, and the National Park Service accepted scoping comments through June 1, 2005. Written public scoping comments were received by fax, email, and U.S. mail. As a result of the public scoping period, the park received comments from 8 individuals and 2 organizations. Formal consultation with American Indian communities also resulted in specific comments. A total of 50 separate comments were received. The analysis of these comments generated 37 general concern statements, which were categorized and considered for incorporation in the planning process. The National Park Service made available

to the public the 30% Design Drawings for this project at the May 2005 Open House. Consequently, many scoping comments received by the National Park Service call for specific actions with regard to these 30% Design Drawings. The Public Scoping Comment and Response Report prepared for the Yosemite Valley Loop Road Project can be reviewed online at [www.nps.gov/yose/](http://www.nps.gov/yose/).

## **Issues and Concerns Addressed in this Document**

The following issues were identified during the public scoping process and through input from National Park Service staff. These issues are addressed in the analysis presented in Chapter III, Affected Environment and Environmental Consequences.

Some of the main concerns raised during the public scoping period include the following:

- Paving and/or removal of specific turnouts along the Yosemite Valley Loop Road
- A reduction in size of the Fern Spring turnout to alleviate impacts to sensitive resources in the area
- The need for revegetation activities during and after construction
- Consideration of different types of parking controls (e.g., barrier stones vs. curbing) to reduce impacts to adjacent areas
- Maintenance and preservation of historic traffic patterns along the Yosemite Valley Loop Road and historic rock work associated with the headwalls and wingwalls of culverts
- Safety issues for pedestrians and bicyclists (i.e., need for crosswalks, additional access and detectable curbing in specific locations)
- Concern for wildlife with regard to vehicle speed and culvert removal
- The need to improve soil conditions and drainage patterns in meadows
- Protection of wetlands and coordination with the Yosemite National Park Division of Resources Management and Science where selected tree removal may be necessary
- Restoration of meadow health with proper culvert and barrier stone placement in specific locations
- Adherence to ‘Best Management Practices’ during the construction phase of project
- Minimal repaving and rehabilitation activities along Northside Drive in areas designated for eventual removal by the *Yosemite Valley Plan* (NPS 2000a)

## **Issues and Concerns Not Addressed in this Document**

Issues and concerns generated through public scoping that are not within the scope of this project, and thereby will not be addressed in the environmental assessment, include the following items:

- Desire to increase park entrance fees to fund this and other park planning projects
- Scenic vista clearing at prominent turnouts
- The restoration of the Fern Spring area (in addition to that proposed by this project)
- The inclusion of other Yosemite Valley Loop Road segments and parking areas outside the designated project area

- Implementation of specific elements called for by the *Yosemite Valley Plan* (NPS 2000a) with regard to traffic circulation patterns in Yosemite Valley

All comments received during the scoping period have been duly considered and are now part of the administrative record for this project.

## Organization of Environmental Assessment

The proposed action and alternatives for the Yosemite Valley Loop Road Project (and the evaluation of potential impacts of three alternatives) will be referred to collectively as the *Yosemite Valley Loop Road Environmental Assessment*. The contents of this document are as follows:

**Executive Summary** – The Executive Summary succinctly summarizes all pertinent information contained within the document.

**Chapter I, Purpose and Need** – The first chapter includes a discussion of the project’s purpose and need, planning context, issues and concerns that are and are not addressed in this environmental assessment, and an overall organization of the document.

**Chapter II, Alternatives** – This chapter discusses the No Action Alternative and action alternatives under consideration by the National Park Service for the Yosemite Valley Loop Road Project and provides a summary table comparing the alternatives.

**Chapter III, Affected Environment and Environmental Consequences** – This chapter provides an overview of the affected environment and presents an analysis of the potential environmental impacts of each alternative on natural resources, cultural resources, and social resources in the Yosemite Valley Loop Road Project area.

**Chapter IV, Wild and Scenic River Act Compliance** – This chapter describes how activities proposed in the Yosemite Valley Loop Road Project will affect the area within the bed and banks of the Wild and Scenic Merced River within the project area.

**Chapter V, Consultation and Coordination** – This chapter summarizes how this environmental assessment was prepared and reviewed.

**Chapter VI, List of Preparers** – This chapter lists the names and qualifications of the persons who are primarily responsible for preparing and reviewing the document.

**Chapter VII, Glossary** – This chapter defines the technical terms and acronyms used in this document.

**Chapter VIII, Bibliography** – This chapter lists the references cited in this document.

In addition, appendices to this document augment and provide supplemental information to that presented in the above sections.